

Abstract:

5 The present invention is a scale to be mounted onto a load-bearing member of a
vehicle, structure or other entity supporting a load to be measured. The invention
uses optics to measure the flexure of the loaded structural member. The flexure
is proportional to the weight of the load. Associated electronics amplify the
optical output signals, feed back one to compensate for temperature variations,
convert the other to digital to drive a readout device that displays the resultant
10 weight figure.